CLAIMS:

- 1. A method of operating a reassembly buffer function, the method comprising the steps of:
 - a) receiving a first fragment from a new packet;
 - b) allocating a buffer location to the new packet;
 - c) moving the allocated buffer location to the end of a buffer list;
- d) receiving subsequent fragments and passing them to the allocated buffer location and repeating step c);
- e) transmitting reassembled packet from the allocated buffer location when the last fragment has been received;
- f) allowing the allocated buffer location to reach the top of the buffer list if no further fragments are received; and
- g) reusing the allocated buffer location when it reaches the top of the buffer list.
- 2. A method according to claim 1, further comprising the step of using the position of the allocated buffer location in the buffer list to effect timing for receipt of fragments from each packet.